Problem Statement
Trauma is a hidden epidemic. We only now begin to see the consequences of trauma on a population level with elevated costs over the lifespan affecting the major healthcare and social service systems in America. In the Adverse Childhood Experiences (ACE) study by Kaiser Permanente and the Centers for Disease Control, researchers identified strong, graded relationships between exposure to childhood traumatic stressors and numerous negative health behaviors and outcomes, health care utilization and overall health status later in life. For example, persons who had experienced four or more categories of childhood exposure, compared to those who had experienced none, had 4- to 12-fold increased health risks for
- alcoholism,
- drug abuse,
- depression, and
- suicide attempt.

These adverse experiences increase costs in many systems. Within the health care system, prescription rates for antidepressant, anxiolytic, antipsychotic, and mood-stabilizing/bipolar medications for persons with a score of equal to or more than 5 increased 3-, 2-, 10-, and 17-fold for these classes of drugs, respectively compared to those with an ACE score of zero¹.

The human and economic costs of the long-term effects of adverse childhood experiences on the workforce are likely major and merit attention by the business community in concert with the health care community. Recent studies estimated annual costs as high as $28 billion for chronic back pain for US businesses, $30-$44 billion for depression and related absenteeism, reduced productivity, and medical expenses, and $246 billion for chemical dependency in the workforce (cited in Anda, 2007).

Child maltreatment has been shown to have many negative effects on survivors, including poorer health, social and emotional difficulties, and decreased economic productivity. A study reported by the Centers for Disease Control and Prevention released in 2012 found these negative effects generate many costs over a survivor’s

lifetime that impact the nation’s health care, education, criminal justice and welfare systems. Key findings:

- The estimated average lifetime cost per victim of nonfatal child maltreatment includes:
  - $32,648 in childhood health care costs
  - $10,530 in adult medical costs
  - $144,360 in productivity losses
  - $7,728 in child welfare costs
  - $6,747 in criminal justice costs
  - $7,999 in special education costs

In Oregon in 2011, the following table illustrates the percentages of people that reported having zero, one, two, three, or four or more ACEs. Estimates of the number who experienced one or more adverse childhood experiences are derived by applying the weighted BRFSS percentages to the 2010 census for Oregon of 3,831,074.

<table>
<thead>
<tr>
<th>Total number of ACES</th>
<th>% BRFSS respondents (weighted)</th>
<th>Estimated prevalence of Oregonians with # of ACEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero ACES</td>
<td>37.8%</td>
<td>1,441,342</td>
</tr>
<tr>
<td>One ACE</td>
<td>23.0%</td>
<td>877,007</td>
</tr>
<tr>
<td>Two ACES</td>
<td>12.8%</td>
<td>488,073</td>
</tr>
<tr>
<td>Three ACES</td>
<td>9.8%</td>
<td>373,681</td>
</tr>
<tr>
<td>Four ACES</td>
<td>7.4%</td>
<td>282,167</td>
</tr>
<tr>
<td>Five or more ACES</td>
<td>9.2%</td>
<td>350,803</td>
</tr>
</tbody>
</table>

Categories of trauma and stressful events in the Adverse Childhood Experiences study include: abuse (verbal, physical, or sexual), household dysfunction (parental separation or divorce, living with domestic violence, substance abuse, or mental illness, or household member in prison), and health-related behaviors from adolescence to adulthood. Individuals received a point for each category of adversity to produce their ACE score. This research finds strong, graded relationships between exposure to childhood traumatic stressors and numerous

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3 Source: BRFSS, 2011, OHA (Public Health division)
negative health behaviors and outcomes, increased health care utilization and diminished health status later in life. These negative health behaviors include smoking, drug and alcohol abuse, and risky sexual behaviors. Decreased health outcomes include common chronic diseases such as cardiovascular disease, cancer and depression throughout the lifespan. 4

The human and economic costs of adverse experiences drain individuals’ resources for health and productivity. It is time to utilize our growing knowledge of the effects of adverse childhood experiences to develop a collaborative system at the individual, family, community and state levels to produce communities of healthy, engaged individuals within healthy, engaged families.

**Definition of Trauma**
Trauma is the unique individual experience of an event or enduring conditions in which a person’s ability to integrate his/her emotional experience is overwhelmed. The person experiences (either objectively or subjectively) a threat to his/her life, psychological safety, bodily integrity, or that of a caregiver or family member. Trauma experiences are emotionally painful or distressing, and frequently result in lasting mental and physical effects5.

Childhood exposure to traumatic events is a major public health problem in the United States. Inter-relational trauma, characterized by a repeated pattern of damaging interactions, refers to the range of mistreatment, interpersonal violence, abuse, assault, and neglect experiences encountered by children and adolescents, and some adults, including:

- Familial physical, sexual, emotional abuse and incest;
- Community-, peer-, and school-based assault, molestation, and severe bullying;
- Severe physical, medical, and emotional neglect;
- Experiencing or witnessing domestic violence;
- Serious and pervasive disruptions in caregiving as a consequence of severe caregiver mental illness, substance abuse, criminal involvement, or
- Abrupt separation or traumatic loss6.

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5 [http://www.ecmhc.org/tutorials/trauma/mod1_1.html](http://www.ecmhc.org/tutorials/trauma/mod1_1.html)

6 This composite definition of interpersonal trauma derives from trauma exposure definitions and categories utilized by the National Child Traumatic Stress Network (NCTSN) in the Network’s large, multisite, longitudinal child
Children and adults can also experience trauma from

- Accidents,
- Natural or human-caused disasters, and
- Death of a caregiver.

Culturally specific experiences of trauma may include:

- Prolonged experience (historical events such as the removal from homelands, slavery, ongoing sexual abuse);
- Cumulative effects (high rates and exposure to violence, such as domestic violence and community violence);
- Personal events that impact several generations (boarding schools, massacres, forced relocation, early losses, slavery);
- Violent deaths (homicide; suicide; unintentional injuries); and
- Multiple victimization (two or more different types of victimization).

**Attachment**

Attachment is defined as an enduring relationship with a specific person that is characterized by soothing, comfort, pleasure and safety. It also includes feelings of intense distress when faced with the loss or threat of loss of the attachment person.

The primary attachment between the child and their primary care giver provides the security and safety necessary for the child to master an array of competencies including the ability to self-regulate, develop positive relationships and acquire cognitive skills relevant to learning. Additionally, it provides the foundation for self and identity formation and provides the buffering needed when the child faces stresses that overwhelm their capacity.

Attachment is categorized as secure, ambivalent, avoidant and/or disorganized. Of these four categories, individuals with disorganized attachment have the most significant risk for later mental health disorders.

**Stressors in Early Childhood**

trauma database (Pynoos et al., 2008) as adapted from child trauma exposure definitions established by the National Child Abuse and Neglect Data System (NCANDS; U.S. Department of Health and Human Services, 2011).
The experience of trauma challenges an individual at any time in their life. However, the magnitude of the challenge is greater if the brain has not completed critical development. Stressful events can be harmful, tolerable, or beneficial, depending on how much of a bodily stress response they provoke and how long the response lasts. The impact of stressful events depends upon whether the stressful experience is able to be managed, how often and for how long the body’s stress system has been activated in the past and whether the affected person has safe and dependable relationships to turn to for support.

Healthy development can be derailed by excessive or prolonged activation of stress response systems in the brain and body with damaging effects on learning, behavior and health across the lifespan. For children, their ability to draw on the care giver in response to stressful events depends on the type of attachment and the type of stress: healthy, tolerable or toxic.

- **Positive or healthy stress** refers to moderate, short-lived stress responses, such as brief increases in heart rate or mild changes in the body’s stress hormone levels. This kind of stress is a normal part of life, and learning to adjust to it is an essential feature of healthy development.
- **Tolerable stress** refers to stress responses that could affect brain architecture but generally occur for briefer periods. The shorter duration of the stress allows time for the brain to recover and reverse potentially harmful effects. In addition one of the critical ingredients that make stressful events tolerable rather than toxic is the presence of supportive adults who create safe environments that help children learn to cope with and recover from major adverse experiences, such as the death or serious illness of a loved one.
- **Toxic stress** refers to strong, frequent or prolonged activation of the body’s stress management system. Stressful events that are chronic, uncontrollable, and/or experienced without the child having access to support from caring adults tend to provoke these types of stress responses.

**Consideration of Risk Factors**
In order to understand the protective and risk factors affecting an individual, it is necessary to know not only their history but also their family and cultural history. Racial background or primary language may be obvious. Many other characteristics or factors can not be determined without assessing acculturation, immigration history, exposure to war or torture and gender identity issues.
Addressing issues related to cultural trauma such as genocide, racism and intergenerational trauma requires not only linguistic responsiveness but cultural responsiveness as well. Culture must be viewed as a strength and protective factor.

**Immigration Trauma**
The cumulative risk factors associated with immigration trauma can place undocumented children and families—who have fled their native countries as a result of violence and oppression—at considerable psychological vulnerability. These factors may include toxic experiences before migrating from their home countries (e.g., historical trauma, intergenerational trauma), during the period of immigration (e.g., parental separation, rape, exploitation by human smugglers), and after they arrive in the host country and begin the acculturation process (e.g., poverty, inadequate housing, social isolation, language barriers, intergenerational family conflicts, acculturation and discrimination issues; Perez Foster, 2001).

Undocumented families affected by trauma present unique challenges and opportunities for practitioners and systems of care. The challenges involve shifting from interventions based on dominant cultural tendencies and ethnocentric perspectives to practices that accept limitations, embrace diversity, and are relationship-based. Interventions must be tailored to a family’s constellation, their history of immigration and oppression, their mother tongue, their unique cultural values and expressions of psychological distress, their spiritual beliefs and religious practices, and their preconceptions of mental health and mental health treatment, along with child-rearing customs, expectations, and their socio-ecological context. The opportunities for practitioners and systems of care reside in developing diversity-informed trauma treatments that are inclusive of marginalized families and that recognize family strengths.

**Linguistic Competency**
Linguistic responsiveness is crucial in trauma work because of the way the brain encodes emotions. When babies are born, voice and language form their first connection to their mothers. Engaging a person in the language in which the trauma occurred can enhance the emotional richness of their memory recall. Considering differences in cultural values, degree of acculturation and generational differences, and identifying, respecting and responding to individuals and families who have experienced adversity and trauma is critical.
Historical Trauma
Historical trauma is sometimes referred to as "multi-generational trauma." It is based on shared experiences by a community such as the American Indian and Alaska Native (AI/AN) people of historic traumatic events like displacement, forced assimilation, language and culture suppression, and forced attendance at boarding schools, and it is passed down through generations. There is a sense of powerlessness and hopelessness associated with historical trauma that contributes to high rates of alcoholism, substance abuse, suicide, and other health issues. Increasingly, AI/AN prevention programs are using culture-based strategies to address the effects of historical trauma in individuals, families, and communities. Other groups have experience historical trauma including African Americans whose ancestors were abducted and sold into slavery.

Gender Identity
The trauma treatment field has made significant inroads to increase awareness and competency in matters of culture and race. However, Lesbian, Gay, Bisexual, Transgendered, Questioning, Intersex and Two-spirit (LGBTQI2-S) individuals are oftentimes overlooked in this discussion. This highly vulnerable population needs more informed, skilled, and culturally competent interventions.

LGBTQI2-S individuals risk family rejection, school harassment, and physical, sexual, and/or emotional abuse in response to suspicion or declaration of their sexual orientation or gender identity. This may result in higher rates of suicide, survival sex, HIV, sexually transmitted infections, unwanted pregnancy, and vulnerability to hate crimes. Because our systems are not set up to collect meaningful data on these individuals, many experts believe that current statistics understate the frequency and severity of their daily fears and traumatic experiences.

Priority populations
As Oregon continues development of systems to support children and young adults in transition with emotional, behavioral and substance related issues, two populations assume high priority because of the numbers of children and youth involved, and the direct and indirect costs:

- Children in the child welfare system and
- Children and youth in the juvenile justice system.
Research shows that while up to 34 percent of children in the United States have experienced at least one traumatic event, between 75 and 93 percent of youth entering the juvenile justice system annually are estimated to have experienced some degree of trauma. The effects of trauma on youth and its impact on youth involvement in both the juvenile and criminal justice systems shows that identifying children who have experienced trauma is either being done inappropriately or not as often as necessary.

Lack of awareness of the impact of trauma on youth may be leaving many of these young people without the services and treatment they need, increasing their risk for involvement in the justice system. Addressing a child’s trauma through the public health system, before the child becomes involved in the juvenile justice system and while in the juvenile justice system, is critical to the well-being of the child, family and the community.

Researchers have extensively documented the impact of abuse and neglect on the short- and long-term health and well-being of children. The biological and psychological effects are concentrated in behavioral, social, and emotional domains. These effects can keep children from developing the skills and capacities they need to be successful in the classroom, in the workplace, in their communities, and in interpersonal relationships.

These findings argue that many of the children involved with child welfare have a set of complex challenges, challenges that may not be addressed by the system and services as they are currently designed. Integrating these recent findings into the design of systems and services will enhance the ability of the child welfare system to improve outcomes for these children and their families. The U.S. Department of Health and Human Services Administration for Children and Families has adopted a new framework to address these issues. Their framework identifies four basic domains of well being: cognitive functioning, physical health and development, behavioral/emotional functioning and social functioning.

**Trauma-Informed Systems and Services**

Trauma-informed services are not specifically designed to treat symptoms related to sexual or physical abuse or other trauma, but they are informed about and sensitive to trauma-related issues present in individuals. A trauma-informed system is one in which all components of a given service system have been reconsidered.
and evaluated in the light of a basic understanding of the role that trauma plays in the lives of people seeking mental health and addictions services. A trauma-informed system accommodates the vulnerabilities of people affected by trauma delivers services in a way that will avoid inadvertent re-traumatization and will engage an individual in treatment. It requires collaborative relationships with other public and private practitioners with trauma-related clinical expertise.

Promotion of Mental Health and Prevention of Mental Illness
A public health framework requires inclusion of health promotion and illness prevention as essential components of a comprehensive mental health system, alongside treatment and aftercare services. Promotion and prevention can offer realistic hope for containing the poor mental health of many people. Increasingly, Promotion of mental health must become part of what each community offers its citizens along with treatment and aftercare services, as part of a comprehensive public health approach.

Prevention emphasizes the avoidance of risk factors; promotion strives to promote supportive family, school, and community environments and to identify and imbue in young people protective factors, which are traits that enhance well-being and provide the tools to avoid unhealthy emotions and behaviors and to increase resilience.

To address the issue of adverse childhood experiences, communities and the individuals who live there must promote wellness for children, their families and all citizens as well as prevent the traumatic experiences that lead to elevated economic and human costs. Even when individuals experience trauma, resiliency and protective factors moderate the experience. Resiliency and protective factors are a normative part of life and include healthy attachment, the ability to control one’s impulses and persevering to solve problems. While protective factors generally develop within the context of the family, other structures and supports surround the child and family. These include health and medical services such as well-child checkups and developmental screening, early learning and educational

activities, and good nutrition and physical activity to support healthy physical development.

Community partners not providing direct services for trauma need to develop capacity to recognize signs and symptoms and make appropriate referrals. In addition, the system needs a way to identify when communities successfully support health in individuals and families. Collaboration of the array of partners within each community comprises a core component of the public health approach. Promotion of behavioral health is integral to health promotion and public health. This includes efforts to enhance individuals’ abilities to achieve developmental competence and a positive sense of self-esteem, mastery, well-being, and social inclusion. Another critical piece of behavioral health promotion focuses on strengthening individuals’ abilities to cope with adversity.

Evidence of emotional well-being is ascertained from individuals' responses to structured scales measuring the presence of positive affect (e.g., individuals is in good spirits), the absence of negative affect (e.g., individual is not hopeless), and perceived satisfaction with life. In addition to identifying trauma and mental health problems, indicators of the health and wellness of individuals and communities is important. Child Trends (2012) has developed rigorous national indicators of flourishing among children and youth for inclusion in national surveys, research studies, and program evaluations. These indicators identify strengths and needs in communities and provide the means of ongoing monitoring.

**Developments to Address Trauma in Other States**

Other states have begun to address the systemic issues within the mental health, juvenile justice and child welfare systems. Maine’s *Thrive Initiative* emerged from the implementation of *trauma-informed care* as one of the core system of care principles. They exercise a “universal precautions” approach of treating each person as if they have experienced trauma. Clinicians understand the effects of trauma on service engagement and the development of the therapeutic relationship. They have made changes to their policies, practices, treatment environments and how they manage crises. Their trauma-informed principles and philosophy address:

- Safety
- Trustworthiness
- Choice
- Collaboration
Mental health providers for the *Thrive Initiative* are required to implement an agency self-assessment, with input from agency staff, family members and young adults who receive services. Following the assessment, they develop a quality improvement plan to address areas of need.

In Massachusetts the Child Trauma Project (MCTP) focuses on taking trauma-informed care statewide to develop a trauma-informed child welfare practice. Their goals are to:

1. Develop a trauma-informed child welfare system to ensure that children impacted by trauma receive screening, assessment, and treatment to address traumatic stress reactions.
2. Increase knowledge of trauma and skills in identification and assessment of trauma that will decrease the incidents of placement disruption and help achieve goals of permanency, safety, and well-being for children in care.
3. The Massachusetts Child Trauma Project will replicate and bring to scale a system of trauma-focused treatments and practices to reduce traumatic stress reactions and improve the social and emotional well-being of targeted children involved with the Department of Children and Families.

New York focuses on introducing a trauma-informed initiative through their juvenile justice system. They identified the need for a new philosophy of care.

- Trauma-informed and trauma-sensitive treatment models were needed.
- Interventions had to be family focused.
- Child abuse prevention, healthy parenting, and care giving needed to be infused in existing and new juvenile justice training and programming.
- The entire staff needed retraining:
  - Asking “What happened to you” rather than determining “what is wrong with you?”
  - Safety Plans,
  - Involve the youth, and
  - Need for “Booster Shots”.

Initial outcomes show that many of the facilities are calmer places. There are fewer staff injuries and fewer restraints. Family members of staff have shared the positive difference in the demeanor of their loved one after a day of duty in a facility.

Agreement was achieved between two proprietary treatment programs to align...
with the Sanctuary approach. They have identified that comprehensive program models require comprehensive evaluation models. They continue to work toward this goal.

Oklahoma and San Diego County have implemented a trauma-informed approach in child welfare. They focus on training child welfare workers about trauma, increase available information about the trauma experienced by the child through trauma screening, and ensuring that children served receive trauma-specific treatment. They increased cross system collaboration, and identified the need to build capacity for trauma treatment providers. The Chadwick Trauma-Informed Systems Project in San Diego developed the following definition:

*An trauma-informed child welfare system is one in which all parties involved recognize and respond to the varying impact of traumatic stress on children, caregivers, families, and those who have contact with the system. Programs and organizations within the system infuse this knowledge, awareness, and skills into their organizational cultures, policies, and practices. They act in collaboration, using the best available science, to facilitate and support resiliency and recovery.*


### Trauma Specific Services

Trauma specific services are designed to treat the actual consequences of trauma. Treatment programs designed specifically for survivors of childhood trauma are consistent on several points: the need for respect, information, connection, and hope for clients; the importance of recognizing the adaptive function of “symptoms”; and the need to work collaboratively in a person-directed and empowering manner with survivors of abuse. All treatment providers should recognize a person’s right to receive services in the most integrated setting in the community. Traumatized individuals seeking help must be given opportunities to be involved as partners in the planning and evaluation of services offered. They should also be given the opportunity to invite and include family and/or friends in that process.

When psychological trauma is not recognized or addressed, people may be unintentionally traumatized or re-traumatized by the agencies and providers trying
to serve them. Re-traumatization can be overt as in the use of coercive interventions, such as seclusion or restraint. It can be less obvious and insidious as may occur when clinicians are insensitive to the potential inflammatory impact of their words or behavior or when the design and physical environment of treatment facilities emphasize control more than comfort.

Examples of trauma specific treatments include:

- Child Parent Psychotherapy
- Trauma Focused Cognitive Behavior Therapy
- Attachment, Self-Regulation and Competence
- The Sanctuary Model
- Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS)\(^\text{9}\)

**Problem Manifestation across Systems**

Behaviors, particularly challenging behaviors, provide indirect information about the possibility of trauma or abuse of the individual. What is *not* revealed by the behaviors is the stage of development when trauma occurred, the context of the abuse or trauma, and the supports available at the time of the events or in the current situation. Without understanding individuals both within the context of their history and development, service providers miss the opportunity for positive intervention.

Systems develop with different missions and resources. Without understanding the varying purposes and missions of systems providers, gaps occur and the impact of adverse or traumatic events continues. Individuals and families seeking services and service providers seeking to provide assistance struggle to find the right fit as well as successful navigation of all of the relevant systems. Overall, the fields of health and behavioral health promotion and the prevention of conditions or illnesses receive a narrow focus and few resources. This dominant paradigm must

\(^{9}\) Resources for trauma-specific services are located at:
http://www.samhsa.gov/nctic/trauma.asp
http://www.nctsn.org/resources/topics/treatments-that-work/promising-practices
shift to overcome the traumatic and adverse experiences of the many individuals in our communities.

**Steps to Improve the System**
Addressing individual, family, and community trauma requires a comprehensive, multi-faceted public health approach. This includes increasing awareness of the harmful short- and long-term effects of trauma experiences across the age span; development and implementation of effective preventive, treatment, and recovery/resiliency support services that reflect the needs of diverse populations; creation of strong partnerships and networks to facilitate knowledge exchange and systems development; training and tools to help systems effectively identify trauma and intervene early; and informed public policy that supports and guides these efforts.

Supports and services covering the continuum of services illustrated in the diagram above from the Institute of Medicine are necessary for all communities.

*Rearrange these steps to follow the continuum from promotion to after care:*
1. Develop an Oregon Health Authority and Department of Human Services strategic plan to promote health, mental health and to prevent illness; develop trauma-informed systems (public health, addictions and mental health, division of medical assistance programs, child welfare, developmental disabilities, vocational rehabilitation, self sufficiency, etc.)
2. Develop indicators to identify health and resiliency in individuals, families and communities.
   - Six Core Strengths for Healthy Childhood Development (attachment, self-regulation, affiliation, attunement, tolerance and respect)
   - Developmental Assets\(^{10}\)
   - Promotion and prevention indicators
3. Provide supports for promotion and prevention of health and behavioral health risks associated with trauma, based on research and evidence.
4. Collaborate and coordinate with other major systems, including the Early Learning System and education, pediatric and family practitioners, juvenile justice, developmental disabilities and child welfare.
5. Identify individuals who are impaired from adverse or traumatic events.
   a. Use of standardized tools to identify individuals with trauma related challenges in functioning.
   b. Screening by system partners and referral to trauma specific treatment.
6. Provide effective treatments, based on research.
   a. Mental health and substance abuse treatment providers assess and incorporate trauma-specific treatment into treatment plans.
   b. Other professions and disciplines provide treatment supports and services, such as home visitors, occupational therapists, educators, etc.
7. Treat the whole person, including attention to relationships, activities to reduce arousal that are patterned and repetitive. Incorporate supports, activities and exercises available in the community, such as mentors, dance groups, tai chi, yoga, parenting education, etc.
8. Provide professional and peer mentors to assist individuals and families to navigate the system and get their needs effectively met.
9. Develop system partnerships to integrate services, such as Wraparound, Differential Response, Strengthening, Preserving and Reunifying Families, and other System of Care initiatives.

\(^{10}\) [http://www.search-institute.org/developmental-assets](http://www.search-institute.org/developmental-assets)
References


Huang, Lark. SAMHSA Strategic Initiative #2: Trauma and Justice. (2010). Retrieved from: http://store.samhsa.gov/shin/content/SMA11-4629/04-TraumaAndJustice.pdf


